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ABSTRACT

As part of a longitudinal study of bereavement among the elderly in Salt Lake City, a conceptual model was developed that suggests that age, sex, socioeconomic status and number of years married will influence the bereaved individuals' perception of the stressfulness of the spouse's death and their ability to cope with it. To describe the role of social support in an elderly sample during the first year of bereavement using the model, 192 adults (mean age, 67.5; mean years married, 39.6) were interviewed or completed questionnaires assessing life satisfaction, depression, perceived health, coping, stress, and social support. Data were collected at 3 and 8 weeks and at 6, 12, 18, and 24 months. Analysis of results for the first year post-bereavement showed that both the structure and the quality of social support networks played a significant role in the first year. At 3 weeks of bereavement, sex (females), age (older persons), and years married (greater number) correlated significantly with social support. Coping correlated with feelings of closeness and the quality of network interactions. At 1 year of bereavement, the size of the social support network was positively related to perceived coping, and the density of the network was inversely related to health. Opportunity to express feelings, perceived closeness, and quality of interaction significantly related to higher life satisfaction, better coping ability, better reported health, and lower depression. Coping and depression levels at 3 weeks of bereavement were the strongest predictors of later coping abilities and depression levels. (BL)

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The Role of Social Support in the First Year of Bereavement in an Elderly Sample

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Introduction

Much has been written about social support as a moderator of stress, but few efforts have been made to explicate the function of social support in stressful situations experienced by the elderly. The loss of a spouse is one of the most severe stressors for individuals at any age. The elderly, however, may be particularly vulnerable following the loss of a spouse because there are fewer opportunities to find substitutes. In some cases the bereaved person may already have outlived both friends and relatives. For some elderly the loss of a spouse may be compounded by the occurrence of other losses such as relocation or diminished physical health. Relocation from the family home to an apartment is likely to disrupt social networks and give rise to a grieving process not unlike that following a death. Loss of personal physical health may reduce mobility and stamina. Unless the person has unusually strong psychological resources, or unusually strong and sensitive confidants, he/she is likely to absorb more losses than can be accommodated. Kastenbaum (1969) refers to this accumulation of losses in the elderly as "bereavement overload." Because the probability of bereavement overload is high for the elderly, the process of grieving for a lost spouse in this population is likely to be significantly different from that displayed in younger populations. The purpose of the longitudinal study reported in this paper was to describe the role of social support during the first year of bereavement in an elderly sample.

Social Support

Social support has both intrigued and baffled investigators. The idea that access to and interaction with other human beings during times of stress somehow diminishes psychological and physical suffering is inherently logical.

We have all experienced the comfort afforded by others in times of distress and yet the intellectual and empirical task of defining social support and describing how it functions has for the most part resulted in an unusually high number of conflicting and ambiguous findings (Williams, Ware & Donald, 1981; Turner, 1981; Holahan & Moos, 1981; Thoits, 1982).

Caplan (1974:4) has stated that the most important factor affecting the outcome of a crisis is "the quality of the emotional support and task-oriented assistance provided by the social network within which the individual grapples with the crisis event." Social support is one kind of resource which is available from social network relationships (Cantor, 1975; Snow & Gordon, 1980).

Many definitions of social support have been proposed over the past two decades. Weiss (1974) emphasizes the provisions of relationships with others: attachment, social integration, opportunity for nurturance, reassurance of worth, a sense of reliable alliance, and the obtaining of guidance. Cobb (1976) has defined social support as information which leads the individual to believe that he/she is cared for and loved, respected and esteemed and a member of a network of individuals with mutual obligations to one another. Kahn (1978:10) describes a concept he labels as "convoy of social support" by which he suggests that "each person can be thought of as moving through the life cycle surrounded by a set of significant other people to whom that person is related by the giving or receiving of social support." Social support is then defined by Kahn (1978:11) as: interpersonal transactions that include one or more of the following: the expression of positive affect of one person toward another; the affirmation or endorsement of another person's behavior, perceptions, or expressed views; the giving of symbolic or material aid to another.

Weiss (1974), Cobb (1976) and Kahn (1978) each describe the interac-

tional, dynamic, and interpersonal characteristics of social support. It is these characteristics which provide the information necessary to determine the quality of social support, a factor increasingly recognized as important in understanding the role of social support in times of stress (Lowenthal & Haven, 1968; Blieszner, 1980; Snow & Gordon, 1980; Conner, Powers & Bultena, 1979).

The provision of support, however, occurs within the context of a social network, the configuration or structure of which determines the nature of support provided. A person's support network is that "set of personal contacts through which the individual maintains his social identity and receives emotional support, material aid and services, information and new social contacts (Walker, MacBride & Vachon, 1977:35). Walker et al. describe five structural characteristics of social networks:

1. Size: The number of people with whom an individual maintains some social contacts.
2. Strength of ties: The amount of time, the emotional intensity, the intimacy and the reciprocal services which characterize the tie (Granovetter, 1973:1361).
3. Density:The extent to which the members of an individual's social network know and contact one another independently of the individual.
4. Homogeneity of membership: The extent to which network members share social attributes, including age, sex, ethnicity, social class, attitudes, values and life style.
5. Dispersion of membership: The ease with which network members can make face-to-face contact.

With the exception of the dimension labeled "strength of ties" the characteristics identified by Walker et al. (1977) represent the morphological

properties of social networks (Mitchell, 1969). Although these properties provide clues to the accessibility and availability of opportunity for social interaction, in themselves they are not evidence of the quality of the relationships that exist within the structure. Thus, measures of both structure and quality are necessary for an understanding of the function of social support in times of stress.

Social Support and Stress

The proposition that social support makes a difference in the way people are able to manage stressful situations is hardly controversial (Cassel, 1974; Cobb, 1976; Kaplan, Cassel & Gore, 1976). Hamburg and Killilea (1979:257) state that extant studies of social support, stress and illness reflect one of the following four hypotheses: 1) That social support has a direct effect on health; that it is the presence or absence of social support which is crucial. 2) That social support provides a buffer against the effects of high stress; that it is the interaction between stressors and social support which is important. 3) That social support has a mediating effect which stimulates the development of coping strategies and promotes mastery; thus social competence may account for the absence of ill health. 4) That the lack of social support exacerbates the impact of stressful life events. Given that social support has an important, if not critical, role in the successful management of stress, what access do older people have to social support?

Social Support and the Elderly

The myth that older people are isolated and deprived of the benefits of social support has been dispelled by a number of writers (Shanas, 1979, 1980; Adams, 1968; Brody, 1978; Troll, 1971; Sussman & Burchinal, 1962). Exchange of

care and services between generations is a common occurrence in family life. Gifts, monetary assistance and child care are frequently provided by the older parents of adult children. Adult children assist parents with heavy housework and repairs and are the most common care providers for sick elderly parents. There is, however, some evidence that when one parent dies, family interaction declines and particularly interaction with aged widowers (Pihlblad & Adams, 1972).

Increasingly the role of non-family in the provision of support has been investigated (Arling, 1976; Hess, 1972; Powers & Bultena, 1976). Arling (1976) studied the differential contributions of family and friends to the morale of elderly widows. The findings are revealing (if not startling): Contact with family members, especially children, does little to elevate morale, while friendships related to less loneliness and worry, more feelings of usefulness and a sense of respect in the community. Arling suggests that friendships arise from and are based upon mutual interests and common life-styles. Friendships are voluntary and spontaneous whereas family ties are obligatory and may result in frustration, hostility and dependency. Because of the similarity of experience and personal characteristics between friends it is likely that exchanges are reciprocal and equal (Blau, 1964; Homans, 1974; Ferraro & Barresi, 1980). Depner and Ingersoll (1980:5) note that the "permanence and adaptive nature of kinship provides a source of increasingly needed instrumental support for the aged person, whereas the selectivity and mutuality of friendships may offer the opportunity for exchange and bolstered self-esteem. Thus each source (family or friends) may offer a distinctly different yet equally important form of support for the older person. Each source must therefore be considered in any investigation of social support and aging.

Of particular and unique interest to a number of investigators has been

the notion of a confidant as a critifal factor in meeting the various exigencies of aging. Focus on the confidant has resulted from an effort to assess the dimesion of quality in social interactions (Tigges, Cowgill & Habenstein, 1980). Although the role of confidant has not been addressed frequently, there is strong evidence of the adaptive value of intimate relationships in times of stress, including illness (Brown, Bhrolchain & Harris, 1975; Dimond, 1978), job-related stress (Gore, 1978; La Rocco, House & French, 1980), retirement and widowhood (Lowenthal & Haven, 1968; Glick, Weiss & Parkes, 1974; Brown, 1980).

In a recent report of confidant relations among the aged, Tigges et al. (1980) make the following observations: most older people have confidants; women are more likely than men to have relatives for confidants; women are more likely to have women confidants; men are equally likely to have either men or women confidants; men are more likely to name sons than daughters as confidants and women are more likely to name daughters; more men than women named spouses as their confidant. This latter finding is supported by Depner and Ingersoll (1980) and may be a factor in the reported greater general vulnerability of males following the death of a spouse.

To summarize the literature on social support, stress and aging, it is apparent that empirical and theoretical interest has increased enormously over the past two decades. There is however relatively little consensus about the specific conditions under which social support functions in the general population. Since the older adult has been the focus of few studies, there is less known about social support and the stress of the aging population. In particular, studies of widowed elderly suffer from several flaws: 1) Most investigators have not used a multivariate analysis which would allow for the independent effects of such variables as age, sex, health and social support

with appropriate controlling procedures. 2) Most studies are cross-sectional in which case it is not possible to show changes in kind or amount of social support throughout the bereavement period. It is likely that the kind of support necessary immediately following the death of a spouse is different from that required several months or years later to adjust to single life. 3) Distinctions between the qualitative and the structural dimensions of social support have not often been attempted. Most often social support has been presumed on the basis of involvement in social organizations (church, clubs, work) or the number of children available.

A Theoretical Model

The model depicted in Figure 1 guided both the conceptualization of the problem addressed in this paper and the analysis of the data. This model

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Figure 1 about here

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suggests that age, sex, socioeconomic status and number of years married will have some impact on the bereaved person's perception of the stressfulness of the death of a spouse and his/her ability to cope with the situation. The demographic characteristics will influence both the structure and the quality of the social supports available to the bereaved person and will have a direct effect on the key outcome variables: depression, coping, health and life satisfaction. The model also suggests that the characteristics of an individual's social network will influence his/her perception of stress and ability to cope. Both the social network and the psychological factors will influence depression, coping, health and life satisfaction during the first year of bereavement. The model also shows that perceived coping will be both a

factor (independent variable) in predicting levels of depression, life satisfaction and health, and an indicator of outcome (dependent variable). The assignment of this dual function was based on theoretical speculation that the extent to which individuals believed they were coping well would be a strong indicator of adjustment to bereavement, as well as a major factor in predicting the magnitude of other indicators of adjustment.

Research Questions

The purpose of this study was to describe the role of social support during the first year of bereavement. Several questions were posed:

1. What is the relationship of social support to depression, coping, health and life satisfaction during the first year of bereavement?
   a. Are there differences in these relationships due to distinctions between structure and quality of social support?
2. To what extent does the social network explain variations in depression, coping, health and life satisfaction during the first year of bereavement?

Method

The data for this paper are part of a longitudinal study of bereavement among the elderly in the Salt Lake metropolitan area. Data for the study were collected at six points in time: 3 weeks, 8 weeks, 6, 12, 18 and 24 months after the death of the spouse. The current paper reports findings for the first year post-bereavement.

Sample. Recently bereaved persons over the age of fifty were identified through obituary notices in local newspapers. Surviving male and female spouses were listed separately and by a simple random procedure assigned to either a group which was interviewed or a group which received a question-

naire. Initial analysis of key variables at this time indicates that these two groups are not different and they are therefore considered as a single group of bereaved older persons for the present paper. The total sample is 192 with 50 males and 142 females.

Measures

Life Satisfaction was determined by the 20-item dichotomous response measure developed by Neugarten et al. (1961). Test-retest reliability is .87; validity is .64. The range of scores is 9 to 20 with 20 indicating very high life-satisfaction.

Depression was measured with the Self-Rating Depression Scale (SDS). This 20-item scale was developed by Zung (1965) as a 4-point scale where respondents are asked to report how often they experience stated feelings. A response of 1 = a little of the time, 2 = some of the time, 3 = much of the time, and 4 = most of the time. Half the items in this scale are scored in the reverse direction to reduce response set. Raw scores were converted to standard scores using a conversion table which establishes a range of 25 (low) to 100 (high). Reliabiltiy for this measure is not reported. Concurrent validity was established at .70 by correlating the SDS with the Minnesota Multiphasic Personality Inventory. In the present study an additional response category was added: 0 = none of the time.

Health is measured by a self-report technique. Respondents were asked "How would you describe your health during the past several weeks?" Responses were given on a 7-point scale with 1 = poor health and 7 = excellent health.

Coping ability was also measured with a single-item self-report. Responses were made on a 7-point scale with 1 = very poor and 7 = excellent. The item was: "How well do you feel you have coped with the death of your spouse?"

Perceived stress was determined by a single item which asked: "How stressful has the death of your spouse been?" Responses were made on a 7-point scale with 1 = very little and 7 = very great.

Social support was measured several ways. Based on the literature on social support we distinguished structure from interaction characteristics. The structural variables were: size, strength of ties and density of the network.

Size was measured by two items: the number of persons named as close friends. We limited this number to 10 since many questions were asked about each person named in the network. The second measure of size was the number (no names) given when asked how many additional persons were considered to be close friends.

Strength of ties was measured by three items: the mean number of years the named network participants were known, the range of years given and the mean number of contacts with network members per month.

Density of the network was measured by three items: the percent of the network who were relatives and the percent who were friends/neighbors. The extent to which network members know each other was also used as an indicator of density but was treated as a distinct variable in the analysis.

The interactional or quality characteristics of the network were measured by five items. The items measured: opportunity to express self (1 = yes, 2 = no) and feeling of closeness to network members (1 = low, 5 = high). Three items were combined to form a measure of the quality of interaction among network members. These items were frequency of contact with members, frequency of shared confidences among members, and frequency of mutual helping within the network. Each of these items were measured on a 5-point scale.

Age, sex, number of years married and socioeconomic status were the

major demographic variables used for this paper. Socioeconomic status was estimated from the mean income of the census tract in which the subject lived.

Data Collection Procedures

Data were gathered by interview and by questionnaire. In the former case the subject was interviewed by a trained research assistant. These interviews took approximately two hours and contained both structured and unstructured questions. The latter portions of the interview were tape-recorded. The subjects whose data were obtained by questionnaire were visited by a trained research assistant who delivered the questionnaire, gave the respondent directions on how to complete it and answered any questions the respondent had about it. The questions for this group of subjects were identical to those asked of the interview group with the exception that no unstructured items were asked and no tape recordings made. The subjects returned the questionnaire to the Project office by mail.

Findings

Data analysis began with a description of the characteristics of the sample. As can be seen in Table 1 females outnumber males (3:1); age ranged

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Table 1 about here

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from 50-93 ($\bar{x}$ = 67.5); number of years married ranged from 6-73 ($\bar{x}$ = 39.6), and religion is predominantly Mormon.

Table 2 is a description of the distribution of scores on the psychological and social network variables at the first data collection period

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Table 2 about here

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which was three weeks after the death of the spouse. At this time while most respondents were reporting high stress, they also reported that they were coping quite well. Similarly, respondents reported involvement with and access to social network resources.

Table 3 describes the outcome variables at three weeks post-death of the spouse. As would be expected, there was a moderate amount of depression

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Table 3 about here

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reported at this time. However, self-reported health was good, as was life satisfaction. As noted above, subjects reported they were coping well.

The model proposed in Figure 1 suggests the hypothesized relationships between the major classes of variables in the study. Table 4 shows the actual zero-order correlation matrix of the study variables. The considerable

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Table 4 about here

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reduction in sample size apparent in Table 4 is a result of our decision to include only those subjects who answered all items on all measures at each time period. Thus there are no missing data in this analysis.

Sex, age and number of years married correlate significantly with three characteristics of the social network. Women report feelings of closeness ($r = .27$, $p<.05$) and strong ties with members of their network ($r = .24$, $p<.05$). Older persons perceive both strong ties with network members ($r = .31$,

$p<.01$) and positive quality of interaction with them ($r = .26$, $p<.05$). Strength of the network is also related to greater number of years married ($r = .24$, $p<.05$). Socioeconomic status does not correlate significantly with the network factors. None of the demographic variables are related to either the psychological or outcome variables.

From Table 4 it is clear that the greater the perceived stress, the more likely the individual is to experience some depression ($r = .32$, $p<.01$). Coping is significantly correlated with two network factors, feelings of closeness ($r = .24$, $p<.05$) and quality of network interactions ($r = .38$, $p<.01$). Coping is also correlated with depression ($r = -.50$, $p<.01$), life satisfaction ($r = .31$, $p<.01$), and health ($r = .37$, $p<.01$).

Several of the social network variables are significantly correlated with the outcome variables at Time One. Opportunity to express self with friends is related to life satisfaction ($r = -.26$, $p<.05$). Perceived closeness with network members correlates with all four outcome variables: depression ($r = -.34$, $p<.01$), coping ($r = .26$, $p<.05$), life satifaction ($r = .23$, $p<.05$), and health ($r = .23$, $p<.05$). Similarly, quality of the interaction among network members is correlated with depression ($r = -.36$, $p<.01$), coping ($r = .38$, $p<.01$), life satisfaction ($r = .28$, $p<.05$), and health ($r = .33$, $p<.01$). It is clear that at three weeks after the death of a spouse (Time One), several social network variables are significantly related to positive outcomes. In the next section the findings which address the research questions are reported.

Relationship of Social Support and Outcome Variables

The first question to be answered asks whether and to what extent there is a relationship between social support and the four outcome variables: de-

pression, coping, health and life satisfaction. And further, are there differences in relationship due to distinctions between structure and quality of the network? Table 5 shows the zero-order cross-lagged correlations between the social support variables and the outcome variables.

Table 5 about here

There are only two significant cross-lagged correlations between structural dimensions of social support and outcome variables: the size of the network is positively related to perceived coping at one year after the death of the spouse ($r = .27$, $p<.05$), and density of the network is inversely related to health six months post-death ($r = -.27$, $p<.05$). That is, less dense networks are related to better perceived health.

Several qualitative dimensions of the social network at Time one are related to the outcome variables during the first year of bereavement. The cross-lagged correlations indicate that opportunity to express one's feelings is related to better life satisfaction scores. Perceived closeness to network members is significantly related to lower depression scores; greater perceived coping; better reported health at only T_1; and better life satisfaction scores. Quality of interaction with network members is significantly related to lower depression scores; greater perceived coping; better reported health; and better life satisfaction. The findings shown in Table 5 answer the questions posed. That is, there are significant associations between the support variables and the outcome variables, and these differences are distinguishable on the basis of the differences between structure and quality of the network.

Social Network as a Predictor of Depression, Coping, Health and Life Satisfaction

The second research question asks to what extent the social network can explain the variation in depression, coping, health, and life satisfaction during the first year of bereavement. The analytic technique used to address this question was a hierarchical multiple regression. The general format of these regressions was a four-step forced entry procedure. In step one the dependent variable at Time one was entered as an independent variable at the three subsequent times; in step two all the demographic variables measured at Time one were entered; in step three the support network variables were entered; and in step four the psychological variables were entered. Table 6 summarizes the results of the multiple regression.

Table 6 about here

Social network and depression. The quality of interaction with network members is the only dimension of the social network at T_1 which has a significant effect on depression at T_2. Other factors associated with depression at T_2 are age and number of years married. Coping at T_1 also has a significant effect on depression at T_4. However, the strongest predictor of depression at T_2, T_3 and T_4 is depression at T_1. The total explained variance for depression at each time period is 69, 68, and 66 percent respectively. Of that, social network factors account for 11, 7 and 14 percent of the total variance.

Social network and coping. The size of the network at T_1 has a significant effect on coping at T_3. Gender is a factor in coping at T_2 and T_3 (women report better coping). The best predictor of coping at $T_{2,3}$ and 4 is perceived coping at T_1. Total explained variance for coping is 56, 56, and 48

percent. Of this, the network variables account for 8, 14, and 13 percent of total variance.

Social network and health. None of the network variables at T_1 have an effect on perceived health at $T_{2,3 \text{ or } 4}$. Both perceived coping ability and stress have a significant effect on reported health at T_4. Health at T_1 is the best predictor of health at $T_{2,3 \text{ and } 4}$. Total explained variance for health is 58, 41, and 64 percent. Of this, social network accounts for 6, 6 and 8 percent, and stress and coping account for 0, 3, and 12 percent of the total variance.

Social network and life satisfaction. Three dimensions of social network have significant effects on life satisfaction. Strength of the network has an inverse effect on life satisfaction at T_1; perceived closeness of network members has a positive effect on life satisfaction at T_2; and size of the network has a positive effect on life satisfaction at T_3. Several demographic variables are related to life satisfaction over time: gender has a significant effect at T_2; number of years married has a significant inverse effect at T_3 and T_4. Perceived coping has a significant effect on life satisfaction at T_4. The total explained variance for life satisfaction over time is 69, 68, and 71 percent. Of this, social network variables account for 8, 13, and 8 percent respectively.

Psychological Variables and Outcome Measures

Perceived coping ability has a significant effect on depression, health, and life satisfaction only at T_4. Similarly, perceived stress has a significant effect on health at T_4. Neither of these variables have a noticeable effect at the earlier time periods.

Discussion and Summary

The purpose of this paper was to describe the role of social support during the first year of bereavement among an elderly group of individuals. In addition to social support, a number of other key variables were analyzed. These included depression, perceived ability to cope with the death of a spouse, perceived magnitude of the stressfulness of the event, life satisfaction and perceived health status. Both face-to-face interviews and questionnaires were used to gather data over the period of one year. Three research questions were posed: What is the relationship of social support to depression, coping, health and life satisfaction during the first year of bereavement? Are differences in these relationships due to distinctions between the structural and qualitative aspects of the network? To what extent does the social network explain variations in depression, coping, health and life satisfaction during the first year of bereavement?

The subjects in this study had, on the whole, relatively large social networks of relatives and friends. In most instances the networks are composed of both relatives and friends who know one another. The quality of interaction in the network was reported very positively by the subjects in this study. That is, the network provided sufficient opportunity for expression of feelings; there were frequent contacts with members of the network, mutual sharing of confidences, and reciprocal helping behaviors among network members. One of the strongest aspects of the network was the feelings of closeness felt by the subjects to the network members. These findings support those of other investigators who report that most elderly individuals are part of a network of friends and relatives. Thus, although the subjects in this study were predominantly Mormon and therefore had strong beliefs about the importance of family ties, it does not appear that this is a causal factor for the finding

of strong linkages between the subjects and their social networks. Rather, it is further evidence that, in general, old people are neither alone nor isolated, but most often are an integral part of a network of family and friends.

The theoretical framework for this study suggested a number of relationships between social network factors and other variables. Of particular interest were relationships which supported the notion that structural features of the network differ from the quality aspects of the network. Among the four structural variables at three weeks after the death of the spouse (T_1), strength of the network was associated with other variables more frequently. Thus women reported greater strength of networks than men. This may be due to women being more integrated with networks prior to the death of a spouse. Older subjects and those who had been married longer also reported greater strength of networks. Two other structural characteristics were significantly associated with other factors in the theoretical model. Density was positively related to depression, and those who reported that their network members knew each other also reported feeling close to network members. In the case of the density-depression relationship, one can only speculate, but it seems reasonable to suggest that individuals who are part of a very dense network may have many friends, but no real confidants. They may therefore be missing the important features of an intimate relationship which might provide protection against depression.

It was clear that at T_1 all three of the qualitative aspects of the social network were significantly associated with the major dependent variables. Opportunity to express oneself to others was inversely correlated with life satisfaction. The inverse relationship was due to the coding format for opportunity of expression where 1 = yes and 2 = no. Thus, if the subject re-

ported a sufficient opportunity to talk with others, it was likely that he/she would also report high life satisfaction. A sense of closeness to members of one's network was associated with less depression, greater perceived coping ability, higher life satisfaction and better reported health. These relationships are intuitively "right," as are those that relate to the quality of the interaction. This factor, it will be recalled, consisted of frequency of contact, reciprocal confiding, and mutual helping. These factors taken together were associated with less depression, better coping skills, higher life satisfaction and better reported health.

Beyond T_1, there was very little evidence of association between th structural aspects of the network and the major dependent variables at $T_{2,3,4}$. On the other hand the qualitative aspects of the network, particularly perceived closeness and quality of the interaction, correlated significantly with the dependent variables at each period in the first year of bereavment. Thus, it appears that there are differences between the structural and qualitative aspects of social networks and that these distinctions are manifest in the patterns of associations with other variables as well as in the relationships that are present over time.

Social network dimensions (either structure or quality) measured at three weeks were not strong predictors of depression, coping, health, or life satisfaction during the first year of bereavement. As has been the case in previous studies of bereavement, the best predictor of depression at each of the time periods after three weeks was the scores on depression at three weeks. This is the case as well with each of the other dependent variables. Two dimensions of the structure of networks had significant direct effects. Larger networks impacted positively on perceived coping at T_3 and life satisfaction at T_4. Strength of the network was inversely related to life satis-

faction at T_2. The reason for this is not immediately evident. Qualitative aspects of the social network had significant direct effects on depression at T_2 (quality of interactions) and life satisfaction at T_3 (perceived closeness).

A substantial amount of the variance in the dependent variables was explained by the variables in the model. And while individual indicators of social networks were not strongly predictive at each time period, overall the network variables explained more of the variation in the dependent variables than either the demographic or the psychological variables. The variance explained by social network variables ranged from six to fourteen percent. The larger changes occurred in depression at $T_{2,4}$, coping at $T_{3,4}$ and life satisfaction at T_3.

In summary, social support seems to play a significant role in the first year of bereavement. While the model proposed in this paper is partially supported, several facets of it need further explication. First, it will be useful to ascertain whether the structure of the network determines the nature of its qualitative components. That is, do size, strength and density affect perceived closeness, opportunity for expression, and/or frequency of reciprocal confiding and mutual helping? Is there such a thing as a network that is too large, too dense or too strong and which inhibits rather than facilitates quality interactions among its members? Second, a distinction between the sources of support should be made in order to elaborate how support may differ when provided by family versus friends. Third, although there is evidence in this report that different kinds of support may be important at different points in time during the first year of bereavement, greater specification of this needs to be done. This report has served as a beginning effort to understand how social support "works" during the first year of bereavement in a group of elderly individuals.

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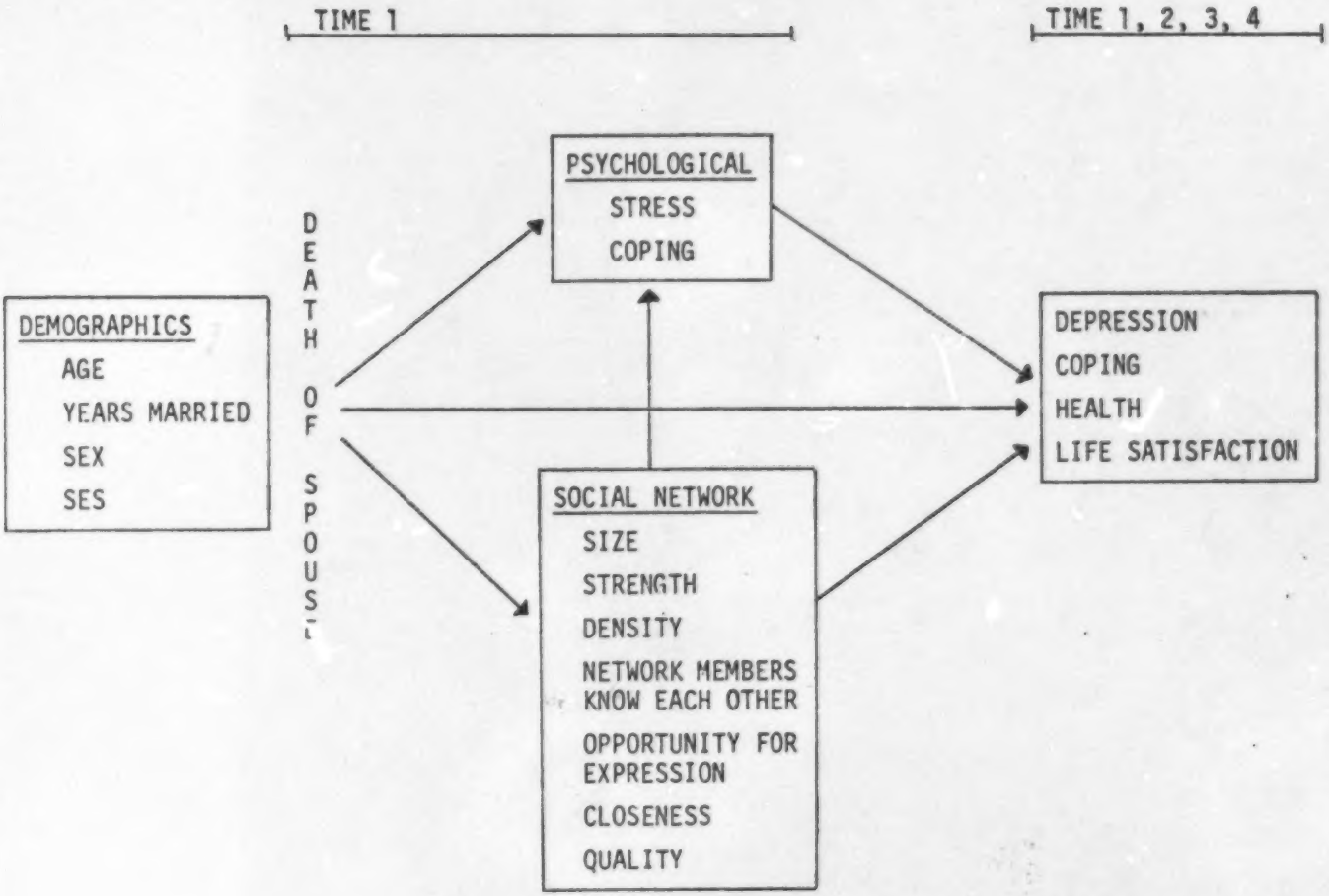

FIGURE 1. MODEL BASED ON TIME HIERARCHY

TABLE 1

DESCRIPTIVE CHARACTERISTICS OF
THE BEREAVED SAMPLE

DESCRIPTIVE CHARACTERISTICS	BEREAVED (N = 192)			
	%	(N)	RANGE	MEAN
SEX:				
MALES	26.0	(50)	-	-
FEMALES	74.0	(142)	-	-
AGE:	-	-	50-93	67.5
50-59	18.0	(37)	-	-
60-69	43.0	(82)	-	-
70-79	30.0	(56)	-	-
80+	9.0	(17)	-	-
SOCIOECONOMIC STATUS: (AREA OF RESIDENCE)				
HIGHEST THIRD INCOME AREA	35.0	(67)	-	-
MIDDLE THIRD INCOME AREA	38.0	(73)	-	-
LOWEST THIRD INCOME AREA	27.0	(52)	-	-
YEARS MARRIED:	-	(192)	6-73	39.6
EMPLOYMENT STATUS:				
NOT EMPLOYED	74.0	(126)	-	-
EMPLOYED PART-TIME	14.0	(23)	-	-
EMPLOYED FULL-TIME	12.0	(21)	-	-
RELIGION:				
LATTER-DAY SAINTS	73.0	(139)	-	-
CATHOLICS	5.0	(10)	-	-
PROTESTANTS	14.0	(25)	-	-
OTHER	4.0	(8)	-	-
NONE	4.0	(8)	-	-
RACE:				
CAUCASIAN	97.0	(187)	-	-
OTHER	3.0	(5)	-	-
EDUCATION:				
LESS THAN HIGH SCHOOL	23.0	(44)	-	-
HIGH SCHOOL ONLY	31.0	(60)	-	-
BEYOND HIGH SCHOOL	46.0	(88)	-	-

TABLE 2

DESCRIPTION OF PSYCHOLOGICAL AND SOCIAL NETWORK VARIABLES AT TIME ONE

VARIABLE	MEAN	S.D.
1. PSYCHOLOGICAL		
PERCEIVED STRESS OF SPOUSE DEATH	5.6	1.4
PERCEIVED COPING ABILITY	5.6	1.2
2. STRUCTURE OF SOCIAL NETWORK		
SIZE	10.0	8.7
STRENGTH(a)	29.0	6.8
DENSITY(b)	25.0	5.5
NETWORK MEMBERS KNOW EACH OTHER	4.2	.8
3. QUALITY OF INTERACTION IN THE SOCIAL NETWORK		
OPPORTUNITY TO EXPRESS SELF TO NETWORK MEMBERS	1.1	.3
PERCEIVED CLOSENESS TO NETWORK	4.6	.5
QUALITY OF INTERACTION(c)	3.9	.6

(a) THREE ITEMS:--AVERAGE NUMBER OF YEARS NETWORK MEMBERS KNOWN
--RANGE OF YEARS NETWORK MEMBERS KNOWN
--MEAN NUMBER OF CONTACTS PER MONTH

(b) TWO ITEMS :--PERCENT OF NETWORK WHO ARE RELATIVES
--PERCENT OF NETWORK WHO ARE FRIENDS

(c) THREE ITEMS:--FREQUENCY OF CONTACT WITH OTHERS
--FREQUENCY OF CONFIDING IN EACH OTHER
--FREQUENCY OF HELPING EACH OTHER

TABLE 3

DESCRIPTION OF OUTCOME VARIABLES AT TIME ONE

VARIABLE	MEAN	S.D.
DEPRESSION (CONVERTED SCORE)	49.2	11.5
PERCEIVED COPING ABILITY	5.6	1.2
SELF-REPORTED HEALTH	4.9	1.5
LIFE SATISFACTION	13.6	3.7

TABLE 4

ZERO-ORDER CORRELATIONS AMONG CLASSES
OF VARIABLES IN THE HIERARCHICAL MODEL AT TIME ONE (N=67)

DEMOGRAPHICS	PSYCHOLOGICAL	SOCIAL NETWORK	OUTCOMES
SEX	-	CLOSENESS .27* STRENGTH OF NETWORK .24*	-
AGE	-	STRENGTH OF NETWORK .31** QUALITY OF INTERACTION .26*	-
YEARS MARRIED	-	STRENGTH OF NETWORK .24*	-
SOCIOECONOMIC STATUS	-	-	-
PSYCHOLOGICAL VARIABLES			
STRESS	-	-	DEPRESSION .40**
COPING	-	CLOSENESS .24* QUALITY OF INTERACTION .38**	DEPRESSION -.48** LIFE SATISFACTION .31** HEALTH .37**
SOCIAL NETWORK			
SIZE	-	-	-
STRENGTH	-	(SEE ABOVE)	-
DENSITY	-	-	DEPRESSION .24*
KNOW EACH OTHER	-	CLOSENESS .28*	-
EXPRESS SELF	-	-	LIFE SATISFACTION -.26*
CLOSENESS	(SEE ABOVE)	-	DEPRESSION -.34** COPING .26* LIFE SATISFACTION .23* HEALTH .23*
QUALITY OF INTERACTION	(SEE ABOVE)	-	DEPRESSION -.36** COPING .38** LIFE SATISFACTION .28* HEALTH .33**

* $p < .05$ ** $p < .01$

TABLE 5

ZERO-ORDER CORRELATIONS AMONG OUTCOME VARIABLES AND DEMOGRAPHIC PSYCHOLOGICAL AND SOCIAL NETWORK VARIABLES AT 3 WEEKS, 2 MONTHS, 6 MONTHS AND ONE YEAR AFTER SPOUSE'S DEATH

		DEPRESSION				COPING			
	TIME 1	T_1 (67)	T_2 (68)	T_3 (60)	T_4 (59)	T_1 (71)	T_2 (72)	T_3 (64)	T_4 (66)
	1. SEX	-07	-11	-15	00	04	16	36**	23
	2. AGE	-02	-04	17	01	19	13	-05	17
	3. YEARS MARRIED	-01	16	21	09	05	05	-04	-05
	4. SES	04	04	-01	-09	-02	-10	09	16
	5. PERCEIVED STRESS	40**	19	25*	26*	-18	-15	-20	-12
STRUCTURE	6. SIZE OF NETWORK	-02	-05	-04	06	03	05	21	27*
STRUCTURE	7. STRENGTH OF NETWORK	01	10	00	07	05	-06	08	04
STRUCTURE	8. DENSITY OF NETWORK	16	18	18	17	-06	-17	-13	-08
STRUCTURE	9. NETWORK KNOWS EACH OTHER	00	09	15	06	02	-03	-08	03
QUALITY	10. OPPORTUNITY TO EXPRESS SELF	03	13	06	19	-14	-17	-07	00
QUALITY	11. PERCEIVED CLOSENESS	-34**	-26*	-23	-30*	26*	16	38**	39**
QUALITY	12. QUALITY OF INTERACTION	-36**	-30*	-23	-28*	38**	33**	24	14
	13. PERCEIVED COPING	-48**	-41**	-48**	-57**	1.0	60**	60**	54**
	14. DEPRESSION	1.0	74**	74**	69**				
	15. HEALTH								
	16. LIFE SATISFACTION								

*p<.05 **p<.01

TABLE 5 (CONT'D)

ZERO-ORDER CORRELATIONS AMONG OUTCOME VARIABLES AND DEMOGRAPHIC PSYCHOLOGICAL AND SOCIAL NETWORK VARIABLES AT 3 WEEKS, 2 MONTHS, 6 MONTHS AND ONE YEAR AFTER SPOUSE'S DEATH

	TIME 1	HEALTH				LIFE SATISFACTION			
		T_1 (69)	T_2 (70)	T_3 (63)	T_4 (64)	T_1 (69)	T_2 (70)	T_3 (62)	T_4 (59)
	1. SEX	-04	03	11	17	12	25*	18	13
	2. AGE	04	02	-16	-02	18	02	20	01
	3. YEARS MARRIED	-04	-12	-17	-15	15	-05	-19	00
	4. SES	-10	-18	-19	-06	00	-09	10	16
	5. PERCEIVED STRESS	03	01	-12	12	-14	-10	-22	-16
STRUCTURE	6. SIZE OF NETWORK	08	-13	-03	07	-11	-10	07	17
STRUCTURE	7. STRENGTH OF NETWORK	-02	04	-05	05	04	-13	-03	00
STRUCTURE	8. DENSITY OF NETWORK	-13	-08	-27*	-11	03	-09	18	-12
STRUCTURE	9. NETWORK KNOWS EACH OTHER	10	04	-06	-12	-02	00	-11	01
QUALITY	10. OPPORTUNITY TO EXPRESS SELF	-15	-01	-07	01	-26*	-27*	-18	-29*
QUALITY	11. PERCEIVED CLOSENESS	23*	21	20	20	23*	33**	25*	15
QUALITY	12. QUALITY OF INTERACTION	33**	32**	11	34**	28*	23*	10	18
	13. PERCEIVED COPING	37**	33*	31*	46**	31**	23*	31*	46*
	14. DEPRESSION								
	15. HEALTH	1.0	70**	52**	64**				
	16. LIFE SATISFACTION					1.0	75**	70**	74**

*p< .05 **p< .01

TABLE 6

SUMMARY OF MULTIPLE REGRESSION SHOWING VARIABLES AT 3 WEEKS WHICH ARE PREDICTIVE OF DEPRESSION, COPING, HEALTH AND LIFE SATISFACTION AT 2 MONTHS, 6 MONTHS AND ONE YEAR

VARIABLES MEASURED AT TIME 1	DEPRESSION			COPING		
	T_2 (68)	T_3 (60)	T_4 (59)	T_2 (72)	T_3 (64)	T_4 (66)
DEPRESSION	.704***	.648***	.687***			
COPING			-.306*	.547***	.494***	.473**
HEALTH						
LIFE SATISFACTION						
SEX				.296*	.300*	
AGE	-.253*					
YEARS MARRIED	.335*					
SES						
PERCEIVED STRESS						
SIZE OF NETWORK					.294*	
STRENGTH OF NETWORK						
DENSITY OF NETWORK						
NETWORK KNOWS EACH OTHER						
OPPORTUNITY TO EXPRESS SELF						
PERCEIVED CLOSENESS						
QUALITY OF INTERACTION	-.331**					
TOTAL R^2	.69	.68	.66	.56	.56	.48
R^2 CHANGE DUE TO DEMO.	.03	.05	.02	.03	.06	.05
R^2 CHANGE DUE TO SOCIAL NETW.	.11	.07	.14	.08	.14	.13
R^2 CHANGE DUE TO PSYCHO.	.01	.01	.04	.00	.01	.00

*p<.05 **p<.01 ***p<.001

Note: The numbers in the body of the table are standardized betas.

TABLE 6 (CONT'D)

SUMMARY OF MULTIPLE REGRESSION SHOWING VARIABLES AT 3 WEEKS WHICH ARE PREDICTIVE OF DEPRESSION, COPING, HEALTH AND LIFE SATISFACTION AT 2 MONTHS, 6 MONTHS AND ONE YEAR

VARIABLES MEASURED AT TIME 1	HEALTH			LIFE SATISFACTION		
	T_2 (70)	T_3 (63)	T_4 (64)	T_2 (70)	T_3 (62)	T_4 (59)
DEPRESSION						
COPING			.444***			.334**
HEALTH	.636***	.437**	.623***			
LIFE SATISFACTION				.671***	.672***	.704***
SEX				.247*		
AGE					-.290*	-.334**
YEARS MARRIED						
SES						
PERCEIVED STRESS			.321**			
SIZE OF NETWORK						.233*
STRENGTH OF NETWORK				-.230*		
DENSITY OF NETWORK						
NETWORK KNOWS EACH OTHER						
OPPORTUNITY TO EXPRESS SELF						
PERCEIVED CLOSENESS					.272*	
QUALITY OF INTERACTION						
TOTAL R^2	.58	.41	.64	.69	.68	.71
R^2 CHANGE DUE TO DEMO.	.03	.05	.05	.06	.08	.04
R^2 CHANGE DUE TO SOCIAL NETW.	.06	.06	.08	.08	.13	.08
R^2 CHANGE DUE TO PSYCHO.	.00	.03	.12	.01	.00	.05

*p<.05 **p<.01 ***p<.001

Note: The numbers in the body of the table are standardized betas.